


# Memorandum



**Date:** November 9, 2015

**To:** Nathan Kogon  
Assistant Director  
Regulatory and Economic Resource Department

**From:**   
Antonio Cotarelo, P.E.  
Deputy Director/County Engineer  
Public Works and Waste Management Department

**Subject:** DIC 12-156  
Name: Lones Family LP, Pinewood Acres School, Inc., and Lee S. & Judy Jones  
Section 05 Township 55 South Range 40 East

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I. PROJECT LOCATION:

9790 SW 97 Avenue

II. APPLICATION REQUEST:

This application requests a special exemption to permit a charter school expansion for grades Pre-K through 8.

III. EXISTING ROADWAYS SERVICEABLE TO THIS APPLICATION:

Access to the site is available from the north and the south from SW 97 Avenue, SW 92 Avenue, and SW 87 Avenue and from the east and west from SW 96 Street, SW 88 Street, and SW 104 Street.

IV. RECOMMENDATION:

Miami-Dade County Public Works and Waste Management Department (PWWM) recommends approval this project for up to a maximum enrollment capacity of 840 students for both North and South Campus combined under the conditions that the project comments and requirements stated within this memo be fulfilled by the applicant. Failure to abide by and implement the approval conditions will result in a withdrawal of the project approval and be substituted by a recommendation of denial. Additionally, failure to abide by the project conditions may result in enforcement action by governing authorities.

V. ANTICIPATED TRAFFIC GENERATION AND CONCURRENCY:

- A. Trip Generation (Based on Institute of Transportation Engineers 8<sup>th</sup> Edition) for the 1260 students requested.

214 PM Peak Hour trips are generated by this development.

B. Cardinal Distribution

North      28%                      East      30%

South 20%

West 22%

## VI. IMPACT ON EXISTING ROADWAYS:

### A. CONCURRENCY:

**Station 9704** located on SW 97 Avenue south of SW 88 Street, has a maximum LOS “D” of **2100** vehicles during the PM Peak Hour. It has a current Peak Hour Period (PHP) of **1126** vehicles and additional **78** vehicles have been assigned to this section of the road from previously approved Development Orders. Furthermore, **Station 9704** with its PHP and assigned vehicles is at LOS “D”. The **49** vehicle trips generated by this development when combined with the **1126** and those previously approved through Development Orders, **78**, equal **1253** and will cause this segment to remain at LOS “D” whose range is up to 2100.

**Station F-66** located on SW 88 Street west of SW 87 Avenue, has a maximum LOS “EE” of **6468** vehicles during the PM Peak Hour. It has a current Peak Hour Period (PHP) of **3681** vehicles and an additional **162** vehicle has been assigned to this section of the road from previously approved Development Orders. Furthermore, **Station F-66** with its PHP and assigned vehicles is at LOS “C”. The **13** vehicle trips generated by this development when combined with the **3681** and those previously approved through Development Orders, **162**, equal **3856** and will cause this segment to remain at LOS “C” whose range is up to 5250.

**Station 9172** located on SW 87 Avenue south of SW 88 Street, has a maximum LOS “SUMA” of **1670** vehicles during the PM Peak Hour. It has a current Peak Hour Period (PHP) of **1342** vehicles and additional **4** vehicles have been assigned to this section of the road from previously approved Development Orders. Furthermore, **Station 9172** with its PHP and assigned vehicles is at LOS “D”. The **41** vehicle trips generated by this development when combined with the **1342** and those previously approved through Development Orders, **4**, equal **1387** and will cause this segment to remain at LOS “D” whose range is 781 to 1570.

**Station F-684** located on SW 88 Street east of SW 79 Avenue, has a maximum LOS “EE” of **6468** vehicles during the PM Peak Hour. It has a current Peak Hour Period (PHP) of **5594** vehicles and additional **4** vehicles have been assigned to this section of the road from previously approved Development Orders. Furthermore, **Station F-684** with its PHP and assigned vehicles is at LOS “EE”. The **14** vehicle trips generated by this development when combined with the **5594** and those previously approved through Development Orders, **4**, equal **5612** and will cause this segment to remain at LOS “EE” whose range is 5390 to 6468.

**Station 9714** located on SW 104 Street west of US1, has a maximum LOS “D” of **1340** vehicles during the PM Peak Hour. It has a current Peak Hour Period (PHP) of **582** vehicles and additional **14** vehicles have been assigned to this section of the road from previously approved Development Orders. Furthermore, **Station 9714** with its PHP and assigned vehicles is at LOS “C”. The **21** vehicle trips generated by this development when combined with the **582** and those previously approved through Development Orders, **14**, equal **617** and will cause this segment to remain at LOS “C” whose range is up to 830.

**Station F-1093** located on SW 112 Street west of US1, has a maximum LOS “SUMA” of **1130** vehicles during the PM Peak Hour. It has a current Peak Hour Period (PHP) of **838**

vehicles and additional **28** vehicles have been assigned to this section of the road from previously approved Development Orders. Furthermore, **Station F-1093** with its PHP and assigned vehicles is at LOS "**D**". The **10** vehicle trips generated by this development when combined with the **838** and those previously approved through Development Orders, **28**, equal **876** and will cause this segment to remain at LOS "**D**" whose range is 661 to 1330.

**Station F-1077** located on SW 87 Avenue north of SW 132 Street, has a maximum LOS "**SUMA**" of **1600** vehicles during the PM Peak Hour. It has a current Peak Hour Period (PHP) of **1244** vehicles and additional **5** vehicles have been assigned to this section of the road from previously approved Development Orders. Furthermore, **Station F-1077** with its PHP and assigned vehicles is at LOS "**C**". The **9** vehicle trips generated by this development when combined with the **1244** and those previously approved through Development Orders, **5**, equal **1258** and will cause this segment to remain at LOS "**C**" whose range is up to 1510.

**Station 9706** located on SW 97 Avenue north of SW 136 Street, has a maximum LOS "**D**" of **1390** vehicles during the PM Peak Hour. It has a current Peak Hour Period (PHP) of **634** vehicles and additional **8** vehicle has been assigned to this section of the road from previously approved Development Orders. Furthermore, **Station 9706** with its PHP and assigned vehicles is at LOS "**C**". The **24** vehicle trips generated by this development when combined with the **634** and those previously approved through Development Orders, **8**, equal **666** and will cause this segment to remain at LOS "**C**" whose range is 151 to 1100.

**Station F-1089** located on SW 112 Street east of SR 874, has a maximum LOS "**D**" of **3580** vehicles during the PM Peak Hour. It has a current Peak Hour Period (PHP) of **2870** vehicles and **5** vehicles have been assigned to this section of the road from previously approved Development Orders. Furthermore, **Station F-1089** with its PHP and assigned vehicles is at LOS "**C**". The **33** vehicle trips generated by this development when combined with the **2870** and those previously approved through Development Orders, **5**, equal **2908** and will cause this segment to remain at LOS "**C**" whose range is up to 3420.

## VII. SITE PLAN CRITIQUE:

- Plans presented for paving and drainage improvements must demonstrate that transition shown for proposed alignment of SW 96 Street is in compliance with Florida Green Book requirements.
- The proposed right turn bay at the northern most driveway and at SW 96 Street do not meet the recommended minimum length of 125 feet and are therefore substandard.
- Paving and Drainage plans must include typical sections (including existing pavement width location) along SW 97 Avenue and SW 96 Street and SW 98 Street.
- The proposed turn radii at the driveway connection from SW 96 Street and for parking area #3 as the exit from drop-off area and approach to exit towards SW 97 Avenue meet the 25 foot minimum dimensions but should be reviewed at building permit to maximize the radii where possible.
- Proposed landscaping shall comply with Index 546 of Florida Department of Transportation Design Standard. Include sight distance triangles area and add a statement certified, signed and sealed by a State of Florida registered engineer.

- On Site Comments:

1. North Campus:

- a. The drive lane egress should maintain a 15 foot turning radius minimum at all turns and provide a longer transition for vehicles entering the right turn lane.

- Traffic Study Comments:

Roadway Facility Analysis (SW 97 Avenue between SW 88 Street and SW 104 Street):

Applicant has submitted a northbound Directional Two-lane Highway Segment Analysis from Kendall Drive to SW 104 Street for the existing and proposed condition. The analysis show an existing operation (1045 veh/hr) of LOS E with a percent time-spent-following of 85.4%, the proposed condition (1301 veh/hr) is expected to operate at LOS E with a percent time-spent-following of 91.5%. The northbound direction would operate at LOS F once the demand increased beyond 1700 veh/hr.

However, an ARTPLAN analysis was conducted by staff to evaluate SW 97 Avenue between SW 104 Street and SW 88 Street and it concluded that the Arterial will be operating at LOS F due to the delays caused at the signal of SW 88 Street. This phenomena occurs because a majority of the green time is given to the east-west movement to process the high eastbound vehicle volumes and little green time (C/g ration 0.13) remains for the northbound movement during the AM Peak.

Due to these varied analytical results, PWWM recommends for the school to operate with a maximum allowable student enrollment of 840 students. Additionally, PWWM does not recommend the implementation of any devices or operations that would create additional delay for the northbound movement due to the high volume to capacity ratio (0.82) projected in the proposed condition.

Intersection Analysis:

1. Intersection SW 97 Avenue with Driveway 2 and SW 98 Street with SW 97 Avenue.

The study proposes three trip assignment scenarios (Initial, Alternative A, Alternative B) for the South Campus. Of the three alternatives, only Alternative B Scenario meets PWWM's LOS criteria at the intersections of Site Driveway with SW 97 Avenue and SW 98 Street with SW 97 Avenue. However, Alternative B is only viable only if the school administration employ extensive traffic management oversight to ensure acceptable traffic flow. Therefore, the school must adhere to the following traffic operations:

- i. Northbound left turns will be prohibited at driveway 2 during the peak hours and will be provided for at the intersection of SW 98 Street with SW 97 Avenue. Therefore, a northbound left turn lane whose length will accommodate the 95% queue is provided at SW 98 Street with SW 97 Ave.

- ii. The eastbound queues at Driveway 2 will be managed to not exceed 40 feet from the egress stop bar and vehicles accessing the site from driveway 3 will be assisted by staff to access the passenger loading zone queue and stacking spaces.
2. Intersection SW 97 Avenue with SW 104 Street (a traffic signal)
    - a. The 33 projected trips added to the eastbound left turn movement estimates a 95<sup>th</sup> percentile vehicle queue greater than the available lane storage. Improvements to the eastbound leg that accommodates the proposed queue must be provided.
    - b. The 37 projected trips added to the southbound left turn movement estimates a 95<sup>th</sup> percentile vehicle queue greater than the available lane storage. Improvements to the southbound leg that accommodates the proposed queues must be provided.

School Traffic Operation Plan (TOP) Comments:

1. The school must commit to operating buses at 86% capacity in order to meet the trip reductions stated within the Traffic Impact Study.
2. School must provide staff to monitor queues and by-pass at the passenger loading zone entrance. Additional, staff must be provided to manage queues and on-site operations for vehicles accessing the passenger loading zone from the driveway on SW 98 Street, specified as conditions for Alternative B (see comment 2 above).

Project Conditions:

All on-site and off-site improvements specified below must be constructed prior to the issuance of a Certificate of Use for the 840 student maximum enrollment school.

Offsite Infrastructure Conditions:

1. The existing school speed zone is required to be improved along the school's frontage roads (SW 97th Avenue, SW 96 Street and SW 98 Street) as per the governing standard. The school speed zone must be composed of signs (fluorescent yellow-green material must be used where applicable), pavement markings, and flashing beacons. The flashing beacons may be required to be installed on mast arms devices due to the roadway's future multi-lane cross-section and the roadway's Arterial designation. The existing posted time intervals for the school speed zone are required to be modified for the new schedule, if applicable.
2. The eastbound intersection approach of SW 96 Street with SW 97 Avenue must be reconstructed to be aligned with the westbound intersection approach.
3. An exclusive northbound left turn lane must be constructed at the following intersections:
  - (i) SW 97 Avenue with SW 98 Street
  - (ii) SW 97 Avenue with South Site Driveway 1
  - (iii) SW 97 Avenue with SW 96 Street
4. An exclusive northbound left turn lane must be constructed at the following intersections:
  - (i) SW 97 Avenue with South Site Driveway 1
  - (ii) SW 97 Avenue with SW 96 Street

The applicant shall dedicate the required right-of-way needed to accommodate the exclusive southbound right lane(s) along SW 97 Avenue in the event that the arterial is fully widened.

5. The uncontrolled midblock crosswalk must be improved (e.g. signs and pavement markings) as per the governing standards.
6. Roadside features (e.g. curb and gutter, street trees) that discourage child passenger drop-off and pick-up activity within the swales must be constructed in the field by the applicant at the following locations.
  - (a) SW 97 Avenue from SW 94 Terrace to SW 97 Street.
  - (b) SW 96 Street along the schools frontage.
  - (c) SW 98 Street along the schools frontage.

The proposed features will be approved during the Paving and Drainage Plan review.

7. All off-site improvements shall be constructed prior to any student enrollment expansion beyond 350 students.

#### Site Conditions:

The student enrollment may not exceed 350 until the construction of the south campus is complete.

#### Operational Conditions:

- a) The school must operate as per the TOP assigned to each construction phase of the project, but may not exceed an enrollment of 840 students for both the North and South Campus combined.
- b) The school must maintain the maximum student limit per arrival and dismissal shift stated within the TOP and with a minimum 30 minute time schedule separation between any two shifts.
- c) The school must agree to provide TOP enforcement by off-duty police during arrival and dismissal for two week duration to ameliorate any TOP non-compliance incidents verified by PWWM.
- d) A before and after school care program must be provided free of charge for shared trip students (car-pooling) that arrive prior to their scheduled arrival times and/or are dismissed earlier than their pick-up time due to co-passenger students.
- e) The school will be required to maintain a minimum of 3 inbound bus trips during the arrival period and 3 inbound bus trips during the dismissal periods to serve the south campus, but will not allow bus accumulations to be greater than the site's bus bay capacity.
- f) The authority to escort any student off of either school site or between the two school sites by school personnel during school hours, including crossing students at the SW 96 Street midblock crosswalk, must be granted in a written consent from the student's parent or guardian. Pedestrian gates used by mid-block crosswalk pedestrians may not be open during arrival and dismissal activities.

#### VIII. STANDARD CONDITIONS:

1. A letter or a plan containing the following certification signed and sealed by a State of Florida registered engineer shall be submitted as part of the paving and drainage plans: "I hereby certify that all of the roads for the subject project comply with all of the applicable

portions of the Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (Florida Greenbook) regarding: design speed, lane widths, horizontal alignment, vertical alignment, stopping sight distance, sight distance, horizontal clearance, vertical clearance, superelevation, shoulder widths, grades, bridge widths, etc."

2. Public sidewalks are required to extend across all school driveways around the site. This will include pedestrian ramps that meet American with Disability Act (ADA) specifications where applicable. All pedestrian crosswalks around the school must have zebra pavement markings.
3. Safe sight distance clearance is required at all driveways; therefore, no trees shall remain or be planted in any clear zones. No tree foliage or branches shall descend below 7 feet within the public right-of-way. All tree placements in sight triangles shall meet or exceed FDOT Index 546. Any proposed planting, relocation or removal of trees and other foliage including any installation of irrigation systems in the public right-of-way must be approved by the R.A.A.M. Division of the Parks Recreation and Open Spaces Department. Also, any relocation or removal of trees must be approved by RER. These approvals should be applied for, and received, prior to DIC Executive Council approval of this project. A "Covenant for Maintenance" agreement, recorded in the public records, must be provided prior to permitting any of these types of installations within the public right-of-way.
4. Plans submitted for Permit shall conform to MUTCD, PWWM and other appropriate standards for engineering design in the public right-of-way. Prior to formal submittal of plans for approval and permitting, a Dry Run Paving and Drainage submittal is required to review compliance with DIC conditions for approval and appropriate standards, and to rectify any discrepancies between existing facilities, plans, conditions for approval, or standards. Existing and proposed striping, signs, and lane widths must be shown on these plans for all adjacent roadways. Also, plans must indicate any existing or proposed private driveways across the streets adjacent to the school site.
5. All roadway improvements including, but not limited to, traffic signs, markings and signals shall be installed by the applicant adjacent to, or nearby, this facility to ameliorate any adverse vehicular impacts caused by the traffic attracted to this facility. Also, traffic control devices, e.g., crosswalks, may be required at locations remote from this site along safe routes to school to provide for pedestrian student safety. These requirements may be determined at the time of Dry Run submittal of Paving and Drainage Plans.
6. PWWM reserves the right to add or modify requirements based upon any additional information that may be received during this review process.

c: Raul A. Pino, PLS, Department of Regulatory and Economic Resources  
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